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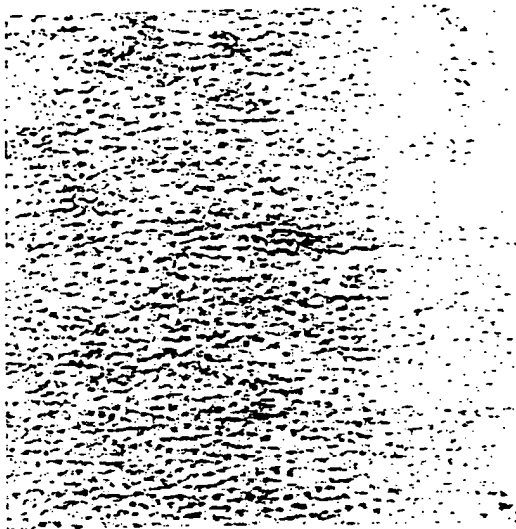


FIG. 1A

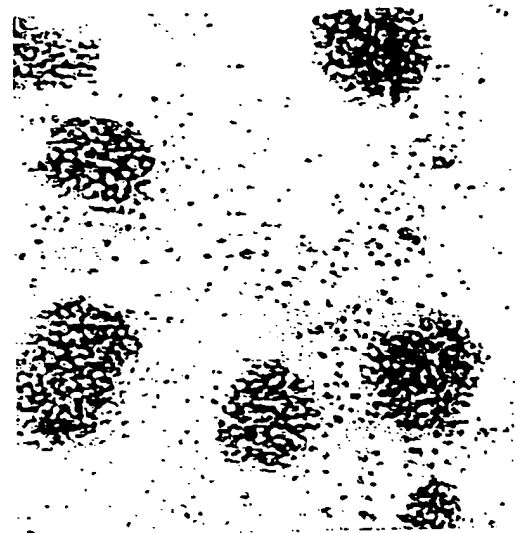


FIG. 1B

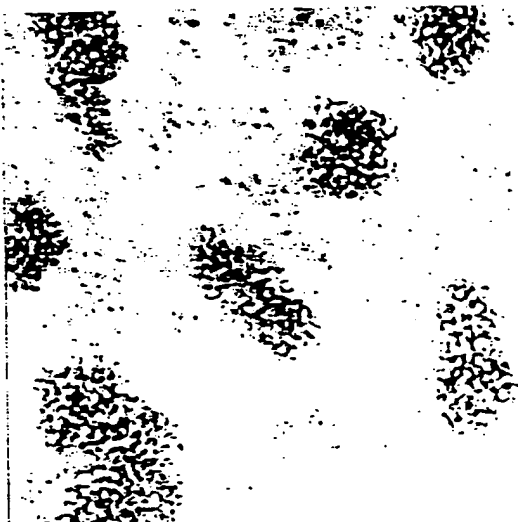


FIG. 1C

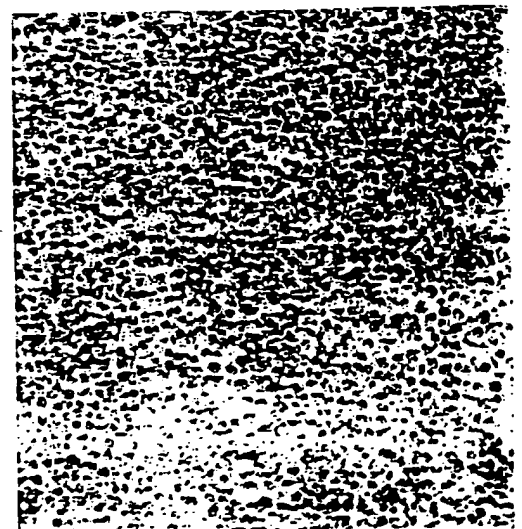
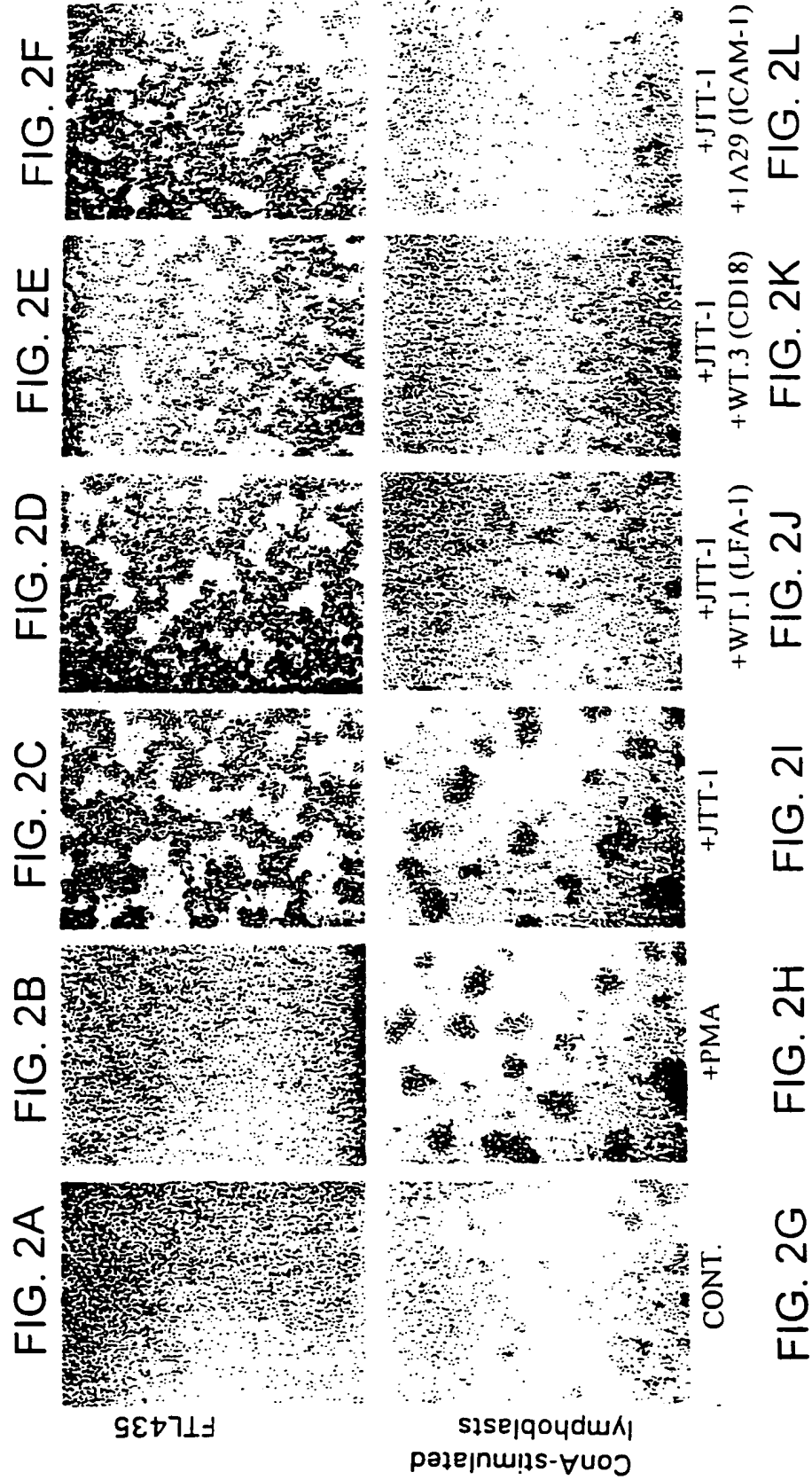


FIG. 1D



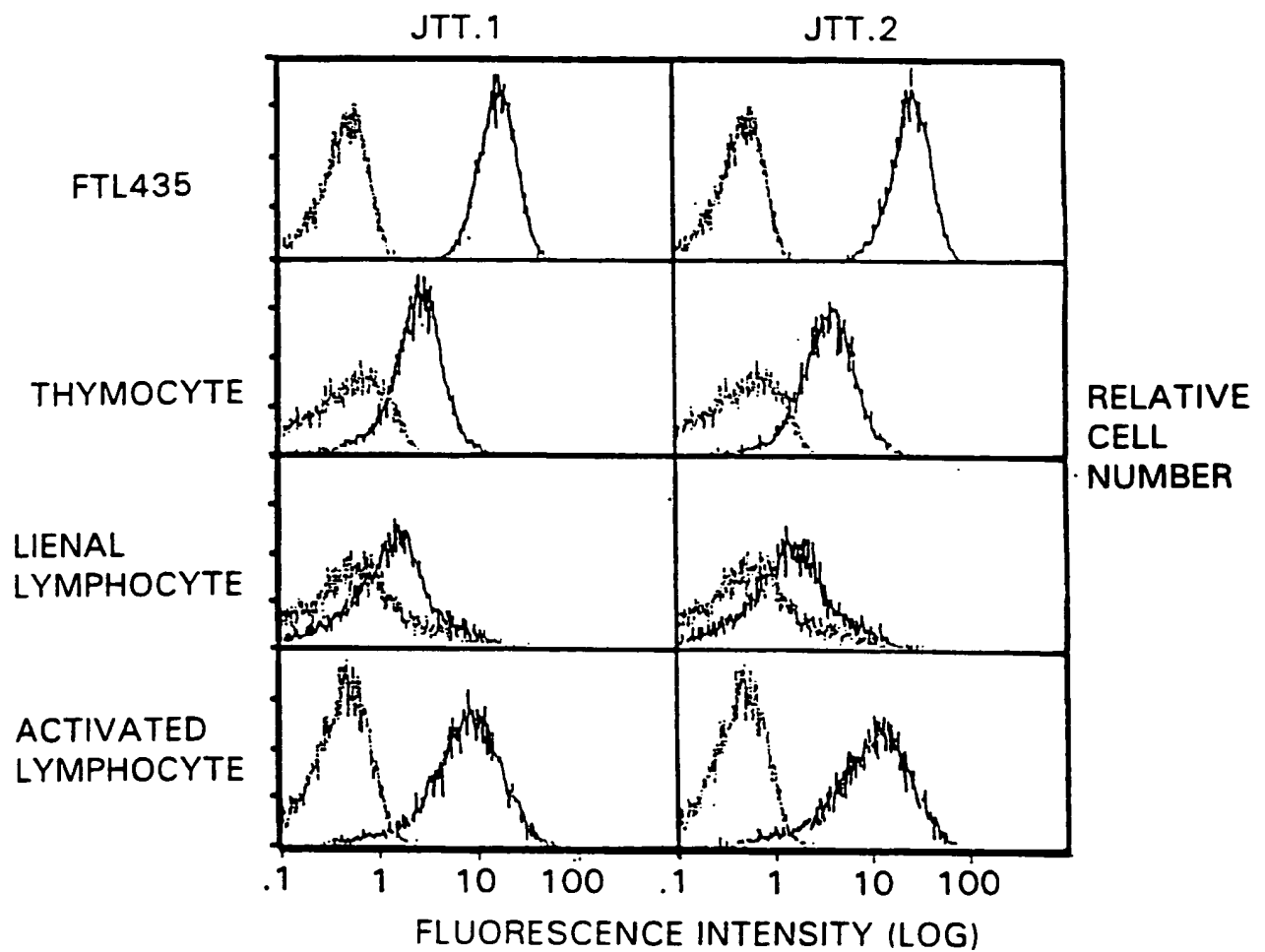
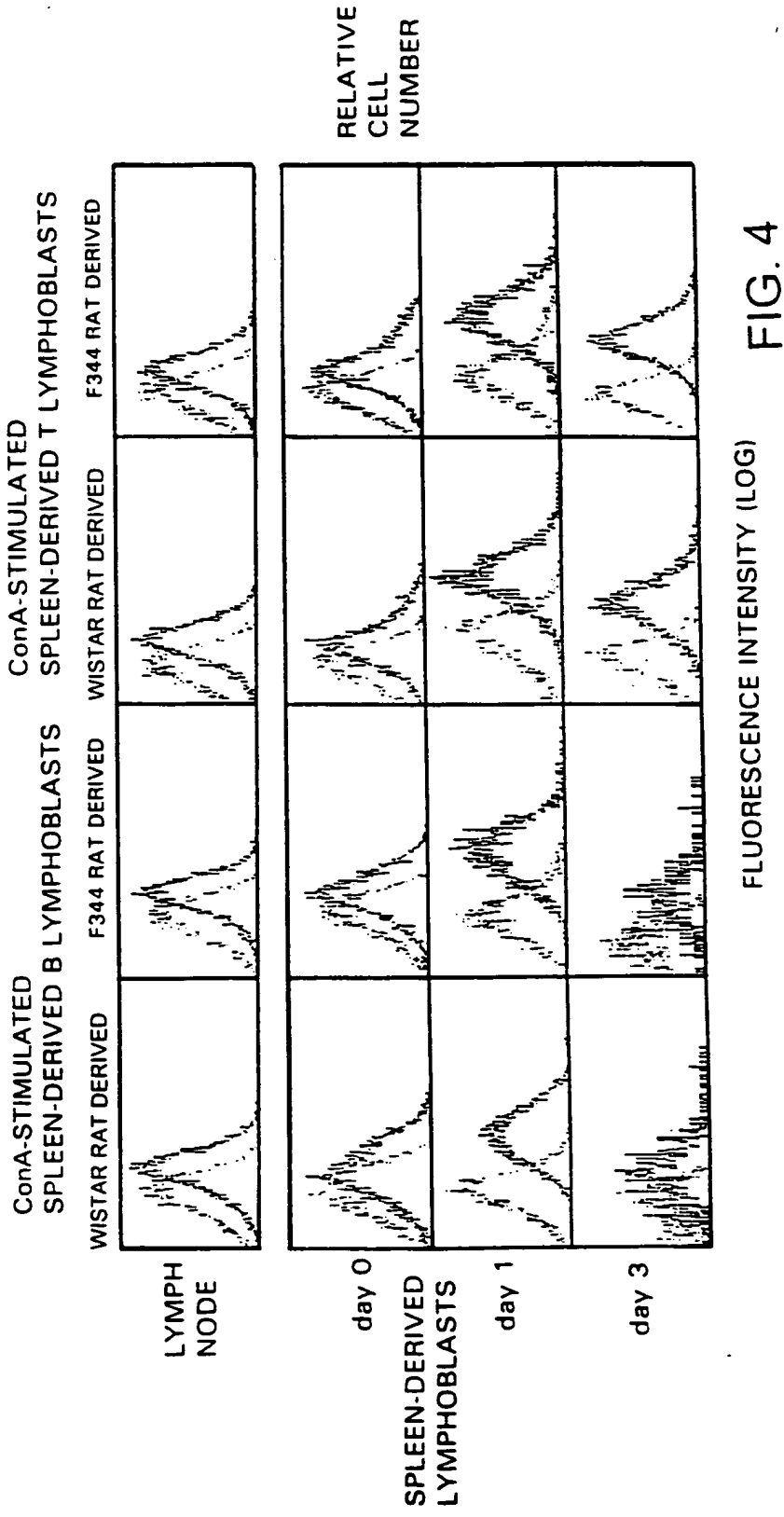


FIG. 3



Applicant(s): Takuya Tamatani et al.

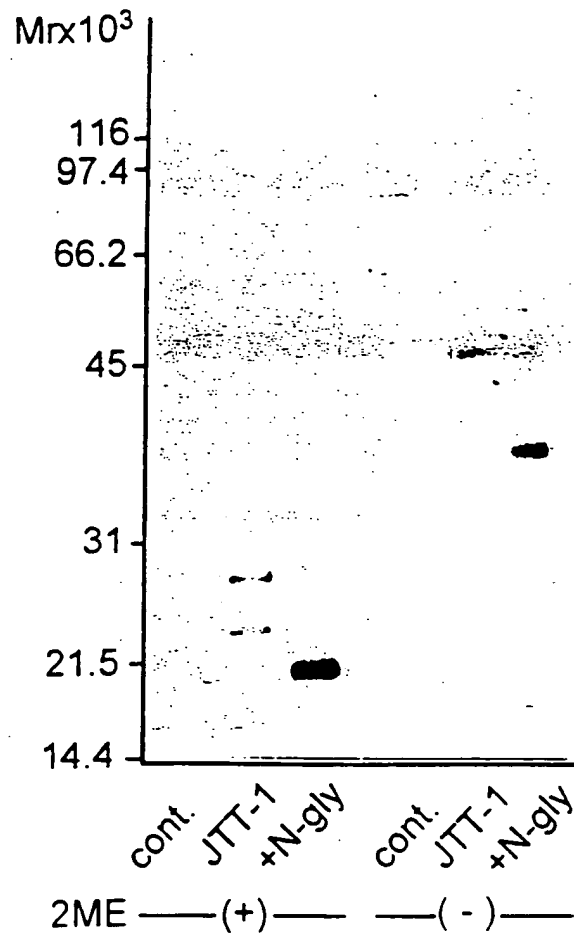
CELL SURFACE MOLECULE MEDIATING CELL ADHESION
AND SIGNAL TRANSMISSION

FIG. 5



FIG. 6A

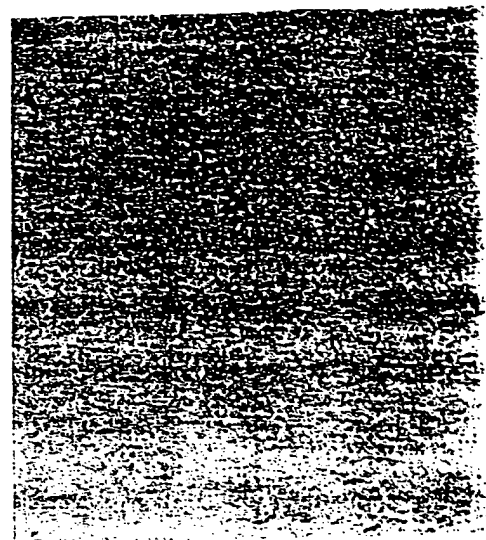


FIG. 6B

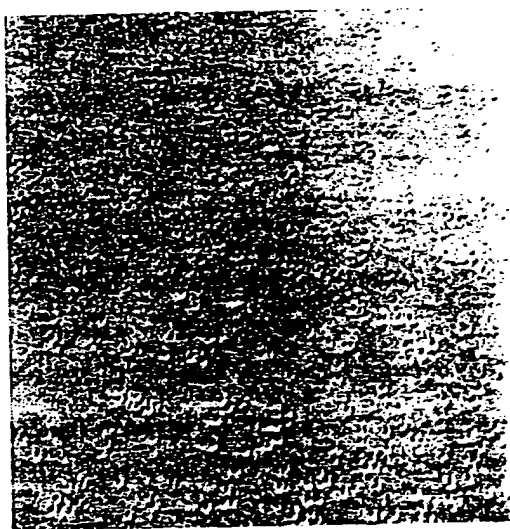


FIG. 6C

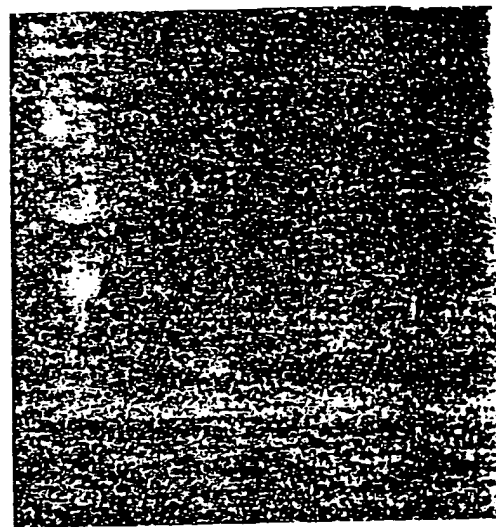


FIG. 6D

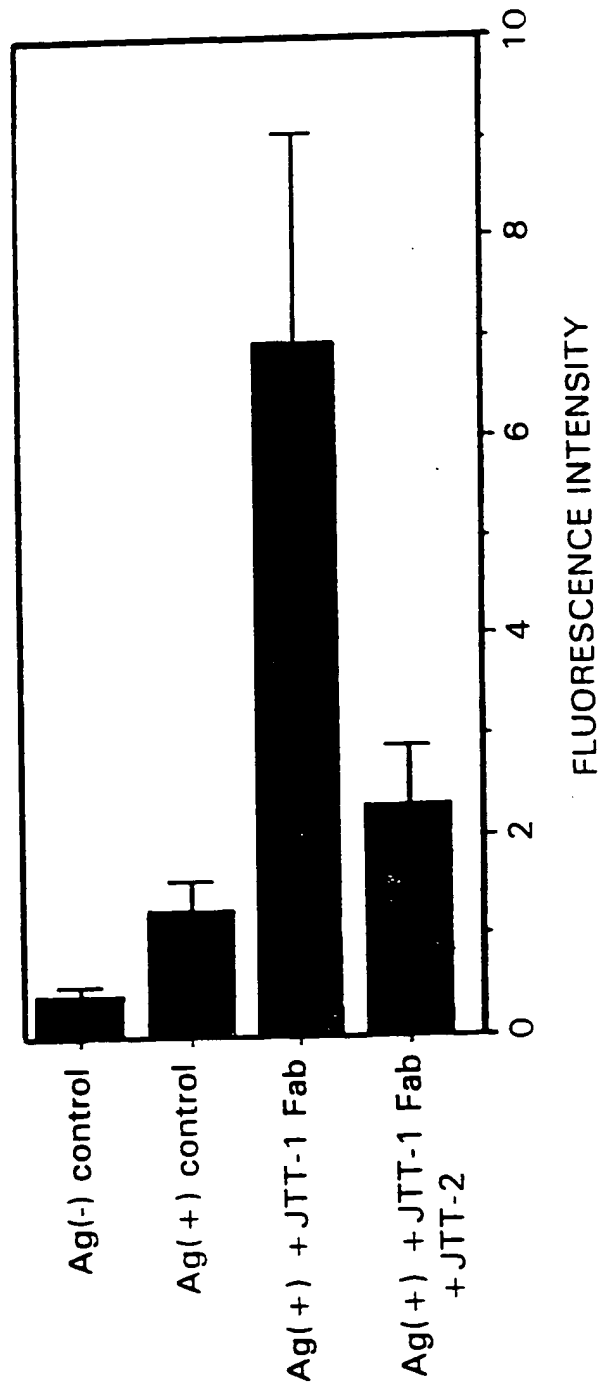


FIG. 7

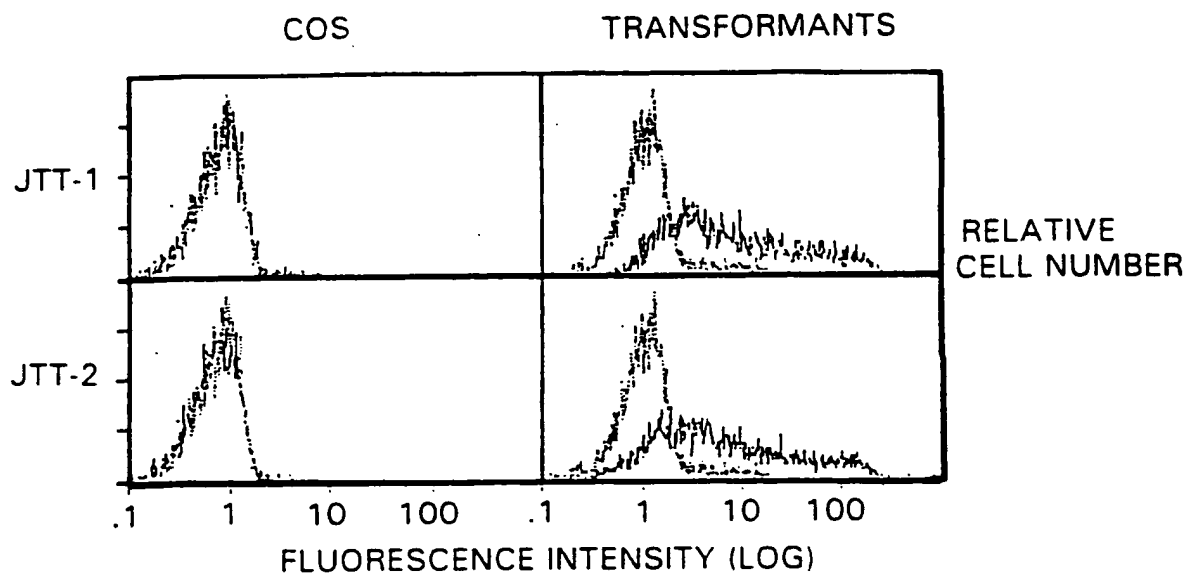


FIG. 8

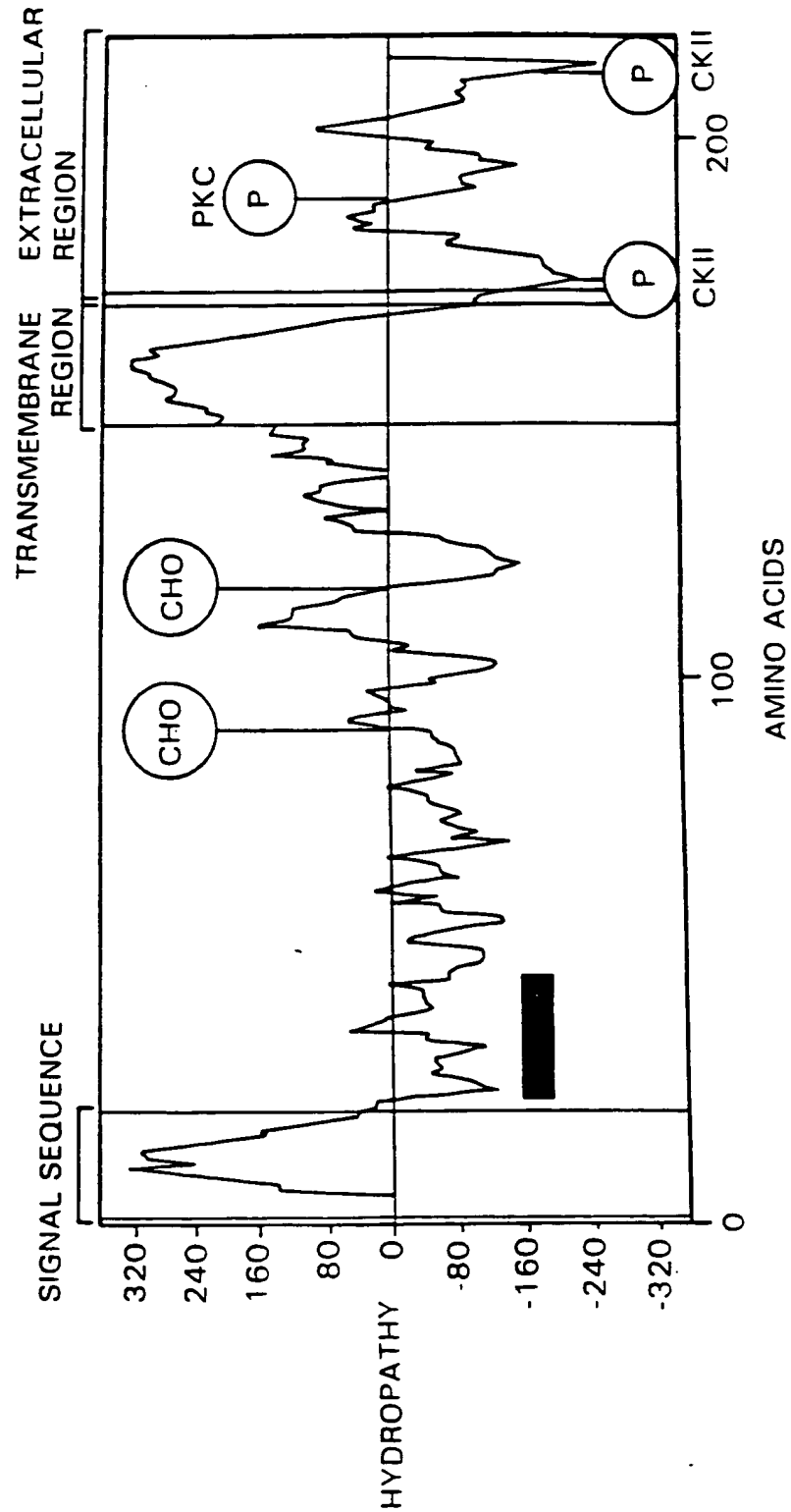


FIG. 9

human	M K S G L W Y F F L	F C L R I I K V L T G E I N G S A N Y E M F I F H N G G V Q I I	L C K Y P D I V Q Q	50
rat	M K P Y F S C V F V	F C F L I K L L T G E L N D L A N H R M F S F H D G G V Q I I	S C N Y P E T V Q Q	50
rat mutant	M K P Y F S C V F V	F C F L I K L L T G E L N D L A N H R M F S F H D G G V Q I I	S C N Y P E T V Q Q	50
mouse	M K P Y F C H V F V	F C F L I K L L T G E L N D L A N H R M F S F H D G G V Q I I	S C N Y P E T V Q Q	50
consensus	M K P Y F . . V F	F C F L I K L L T G E . N . . A N H R M F S F H . G G V Q I I	S C . Y P E T V Q Q	50
human	F K M Q L L K K G G Q	I L C D L T K T K G S G N T V S I K S L K F C H S Q L S N N S V S F F L Y N L D	N L D	100
rat	L K M Q L L F K D R E	V L C D L T K T K G S G N T V S I K N P M S C P Y Q L S N N S V S F F L Y N L A D	N L A D	100
rat mutant	L K M Q L L F K D R E	V L C D L T K T K G S G N T V S I K N P M S C P Y Q L S N N S V S F F L Y N L A D	N L A D	100
mouse	L K M Q L L F R E R E	V L C D L T K T K G S G N T V S I K N P M L C L Y H L S N N S V S F F L Y N L P D	N L P D	100
consensus	L K M Q L L F K . R E	V L C D L T K T K G S G N T V S I K N P M . C . Y Q L S N N S V S F F L . N . D	N . D	100
human	H S H A N Y Y F C N	L S I F D P P P P F Q - V T L T G G Y L H I Y E S Q L C C C Q L K F W L P I G C A A	C A A	149
rat	S S Q G S Y F L C S	L S I F D P P P P F Q E K N L S G G Y L L I Y E S Q L C C C Q L K L W L P V G C A A	C A A	150
rat mutant	S S Q G S Y F L C S	L S I F D P P P P F Q E K N L S G G Y L L I Y E S Q L C C C Q L K L W L P V G C A A	C A A	150
mouse	S S Q G S Y Y F C S	L S I F D P P P P F Q E R N L S G G Y L H I Y E S Q L C C C Q L K L W L P V G C A A	C A A	150
consensus	S S Q G S Y . . C S	L S I F D P P P P F Q E . N L S G G Y L . I Y E S Q L C C C Q L K L W L P V G C A A	C A A	150
human	F V V V C I L G C I	L I C W L T K K K K Y S S V H D P N S E Y M F M R A V N T A K K S R L T D V T L	V T L	199
rat	F V A A L L F G C I	F I V W F A K K K K Y R S S V H D P N S E Y M F M R A V N T A K K S R L A G M T S	T S	200
rat mutant	F V A A L L F G C I	F I V W F A K K K K Y R S S V H D P N S E Y M F M R A V N T A K K S R L A G T A P	T A P	200
mouse	F V V V L L F G C I	L I I T W F S K K K K Y G S S V H D P N S E Y M F M R A V N T A K K S R L A G V T S	V T S	200
consensus	F V . . I L F G C I	L I . W F . K K K K Y . S S V H D P N S E Y M F M R A V N T A K K S R L A G . T .	T .	200
human	- - - - -	- - - - -	- - - - -	199
rat	- - - - -	- - - - -	- - - - -	200
rat mutant	- - - - -	- - - - -	- - - - -	200
mouse	L R A L G R G E H S S C Q D R N	- - - - -	- - - - -	216
consensus	- - - - -	- - - - -	- - - - -	200

FIG. 10

CELL SURFACE MOLECULE MEDIATING CELL ADHESION AND SIGNAL TRANSMISSION

JTT1	M	-	-	-	-	K S G L	-	-	-	W	-	Y F F L	F C L R	I K V	L T G E I N G	S A N Y E M P I F H	34
CD28	M	-	-	-	-	R L L	A	-	-	-	-	L N L P	- P S	I Q V	T G N K I L V	K Q S P M L V A Y D	33
CTLA4	M	A C L G	F O R H K	-	-	A O L N	L A A R T W	P C T	L L F F L L F	I P V	F C K A M H V	A Q P A V V L A S S	50				
consensus	M	-	-	-	-	. L .	A - - - W	-	-	-	-	L . L P	. L .	I . V	. . . . .	A	50
JTT1	N G G V	Q I L	C K Y	-	-	P D I	V Q Q F K	M Q L	L K G G Q I L	-	-	-	-	C D L	T K T	K G S G N T V S I K	78
CD28	N A V	- N L S	C K Y	S Y N	L F S	R E F R	A S L H K G L D S A	V E V	- C V V Y	G N Y S Q Q L Q V Y S K	81						
CTLA4	R G I A	S F V C E Y	A S P G K A T E V R	V T V	L R Q A D S O	V T E V	C A A - - T	Y M T G N E L T F L	98								
consensus	N G . . . .	. C K Y	. P	E F R .	. L L K G . D S .	V	- C	. Y . . G N . V . . K	100								
JTT1	S L K F	C H S Q L S	N N S V	S F F L Y N	L D H S H A N Y	Y F F	C N L S I F D D	P P P P	F - - K V T L T G G	126							
CD28	T G F N	C D G K L G	N E S V T F Y L Q N	L Y V N Q T D I	Y F F	C K I E V M Y P P P P	Y L D N E K S N G T	131									
CTLA4	D D S I	C T G T S S	G N Q V N L T I Q G	L R A M D T G L Y I	C K V E L M Y P P P P	Y Y - L G I G N G T	147										
consensus	. . . .	. C . G . L S	N N S V . F . L O N	L . . . .	. T	Y F	N G T	150									
JTT1	Y L H I	Y E S Q L C	C Q L K F	- - - -	- - - -	L P I G C A	A F V V V C I L	G C	- I L I C W L T K K	167							
CD28	I I H V	K G K H L C	P S P L F F	P G P S K	- - - -	P F W V L V V V G G	V L A C Y S L L V T	V A F I I F W V R S	181								
CTLA4	Q I Y V	I D P E P C	P D S D F	- - - -	- - - -	L L W I L A A V S S	G L F F Y S F L L T	- A V S L S K M L K	191								
consensus	. I H V . . . .	. L C	P	- - - -	- - - -	. V . . . .	. L . . . .	. Y S . L . T	- A . I K	200							
JTT1	K Y S	S S V H D P N	G E Y N F M	R A V N	T A K K S R	- - - -	- - - -	L T D V T L	- - - -	199							
CD28	K R S	- - - R L L H	S D Y M N M	T P R R	P G P T R K H Y Q P	- - - -	- - - -	Y A P P R D F A A Y	R S	220							
CTLA4	K R S	- - - P L T T	G V Y V K M	P P T E	P E - C E K Q F Q P	- - - -	- - - -	- F I P I	- - - -	223							
consensus	K R S	- - - L . .	G . Y M . M	. P . . . .	. K	O P Y - - -	D F	- - - -	- - - -	242							

FIG. 11

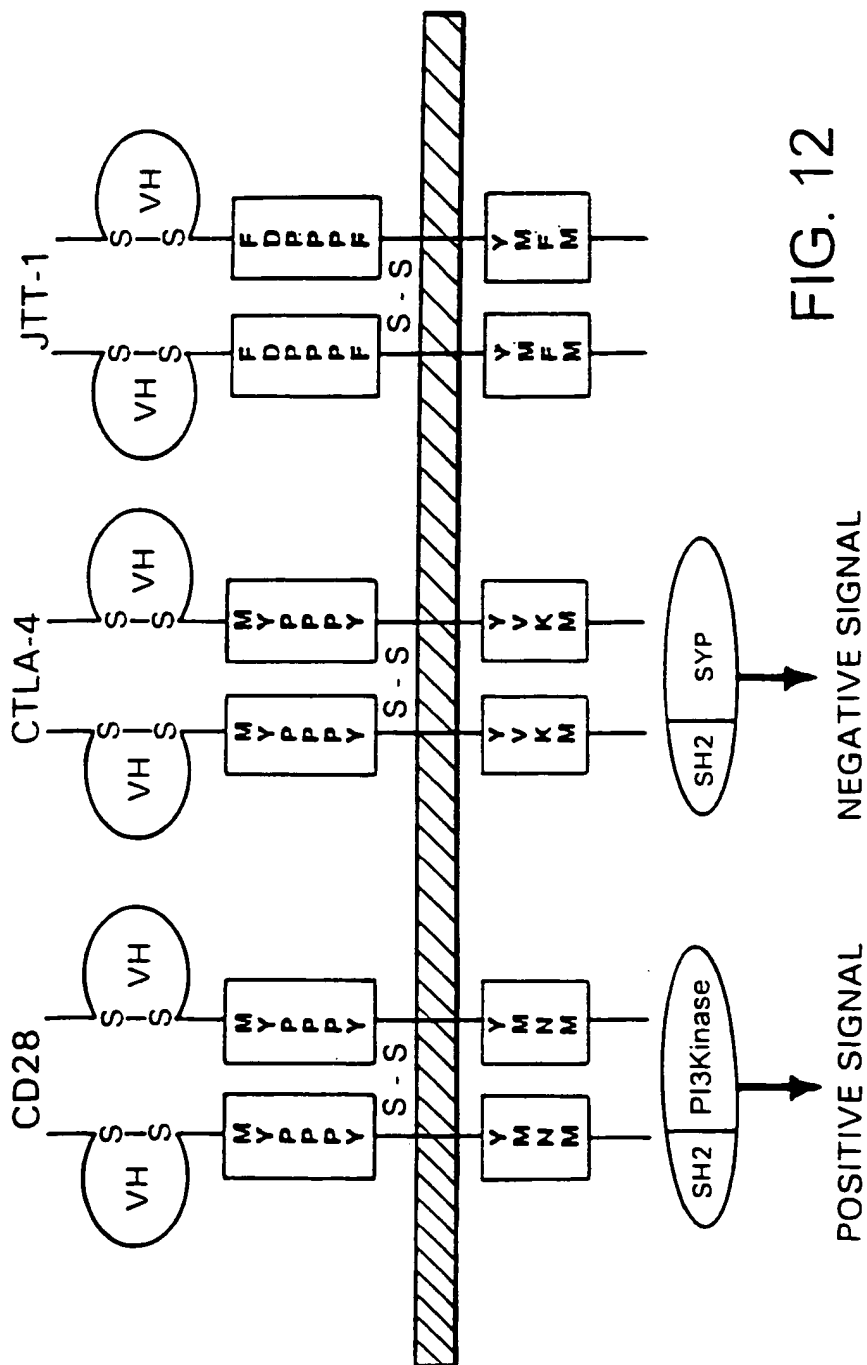


FIG. 12

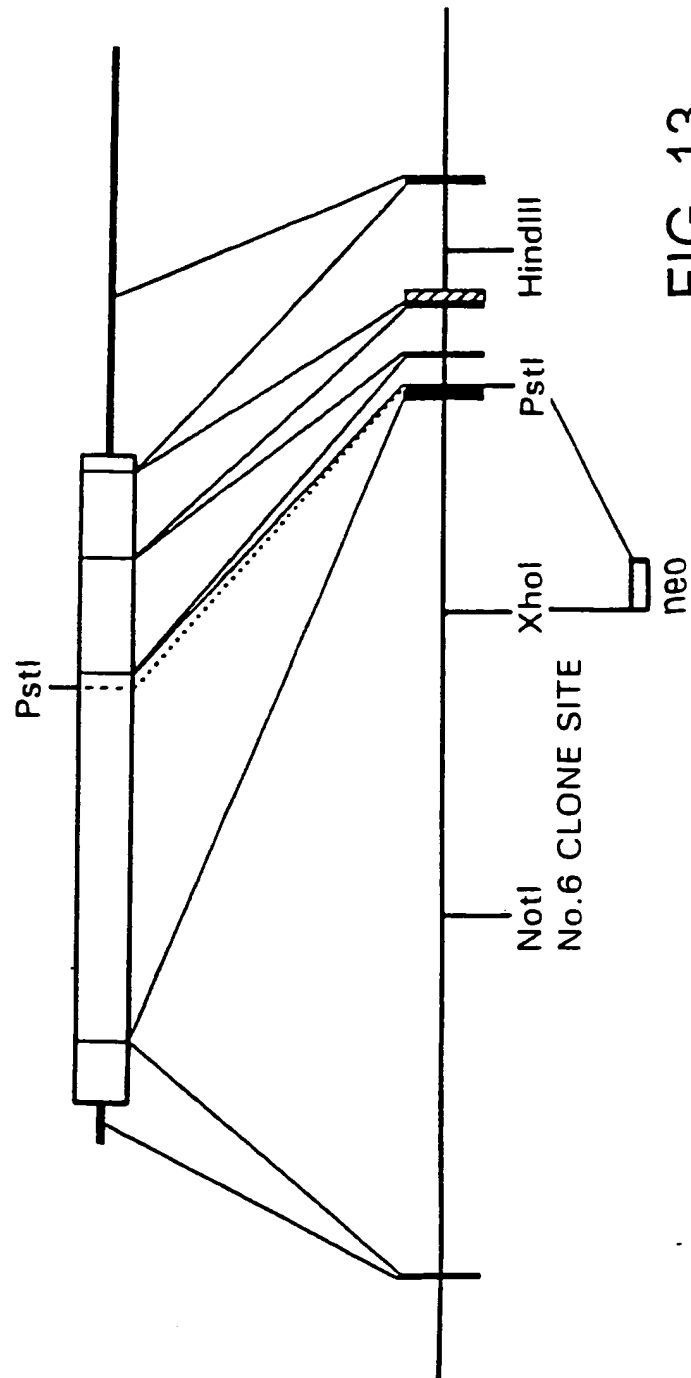
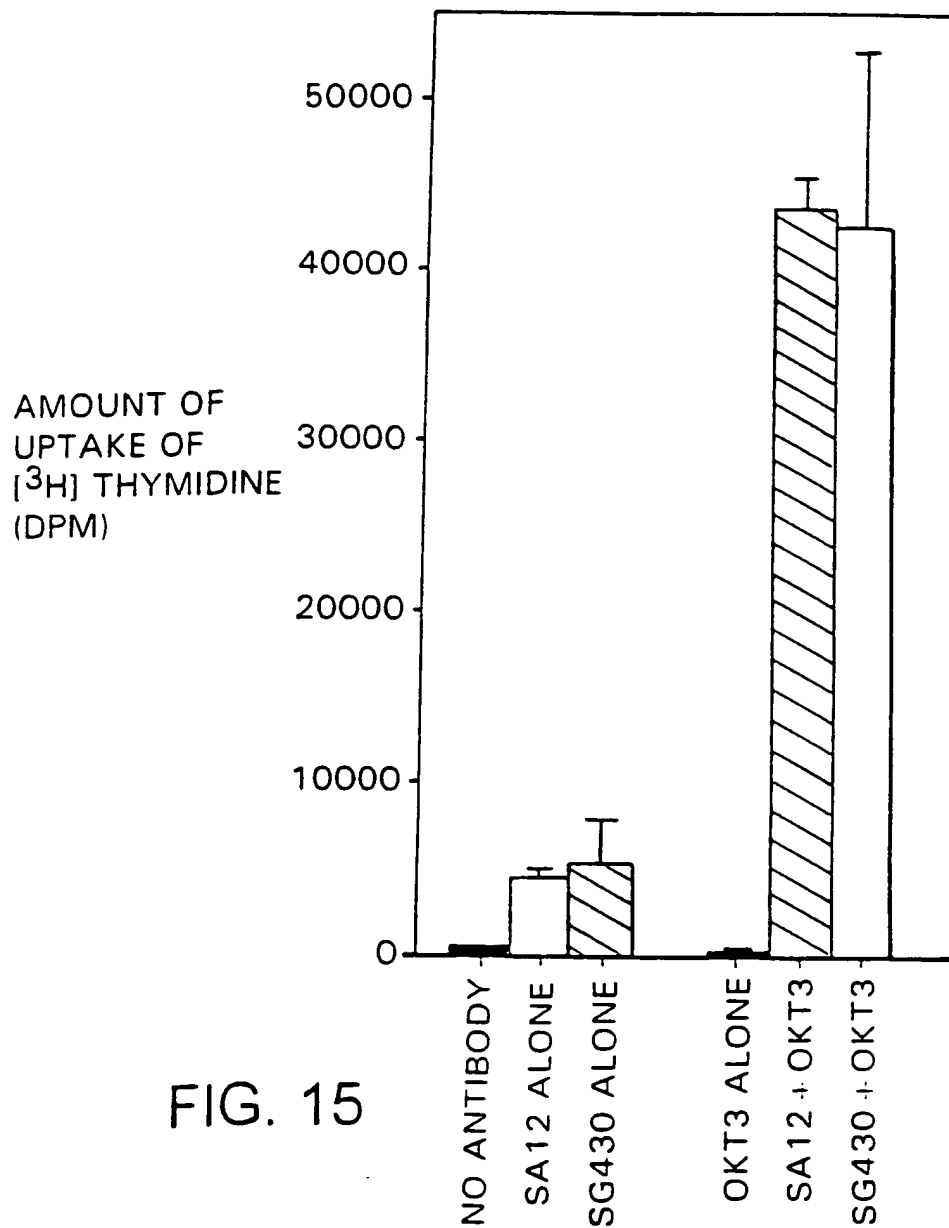


FIG. 13

rat	50	
rat mutant	50	MKPYFSCVFV FCFLIKLLTG ELNDLANHRM FSFHDGGVQI SCNYPETVQQ
consensus	50	MKPYFSCVFV FCFLIKLLTG ELNDLANHRM FSFHDGGVQI SCNYPETVQQ
rat	100	
rat mutant	100	LKMQLFKDRE VLCDLTKTKG SGNIVSIKNP MSCPYQLSNN SVSFFLDNAD
consensus	100	LKMQLFKDRE VLCDLTKTKG SGNIVSIKNP MSCPYQLSNN SVSFFLDNAD
rat	150	
rat mutant	150	SSQGSYFLCS LSIFDPPPFQ EKNLSGGYLL IYESQLCCQL KLWLPVGC
consensus	150	SSQGSYFLCS LSIFDPPPFQ EKNLSGGYLL IYESQLCCQL KLWLPVGC
rat	200	
rat mutant	200	FVAALLFGCI FIVWFAKKY RSSVHDPNSE YMFMAAVNTN KKSRLAG MTS
consensus	200	FVAALLFGCI FIVWFAKKY RSSVHDPNSE YMFMAAVNTN KKSRLAG TAP
rat	216	
rat mutant	216	-----
consensus	216	LRALGRGEHS SCQDRN
	

FIG. 14



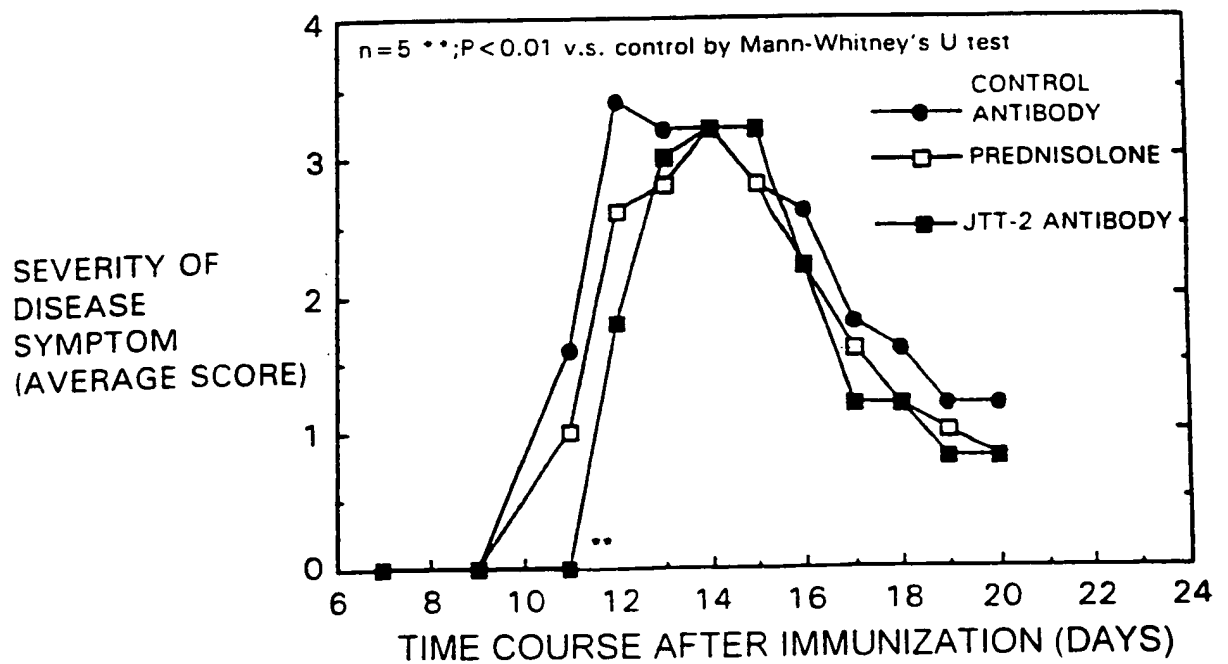


FIG. 16

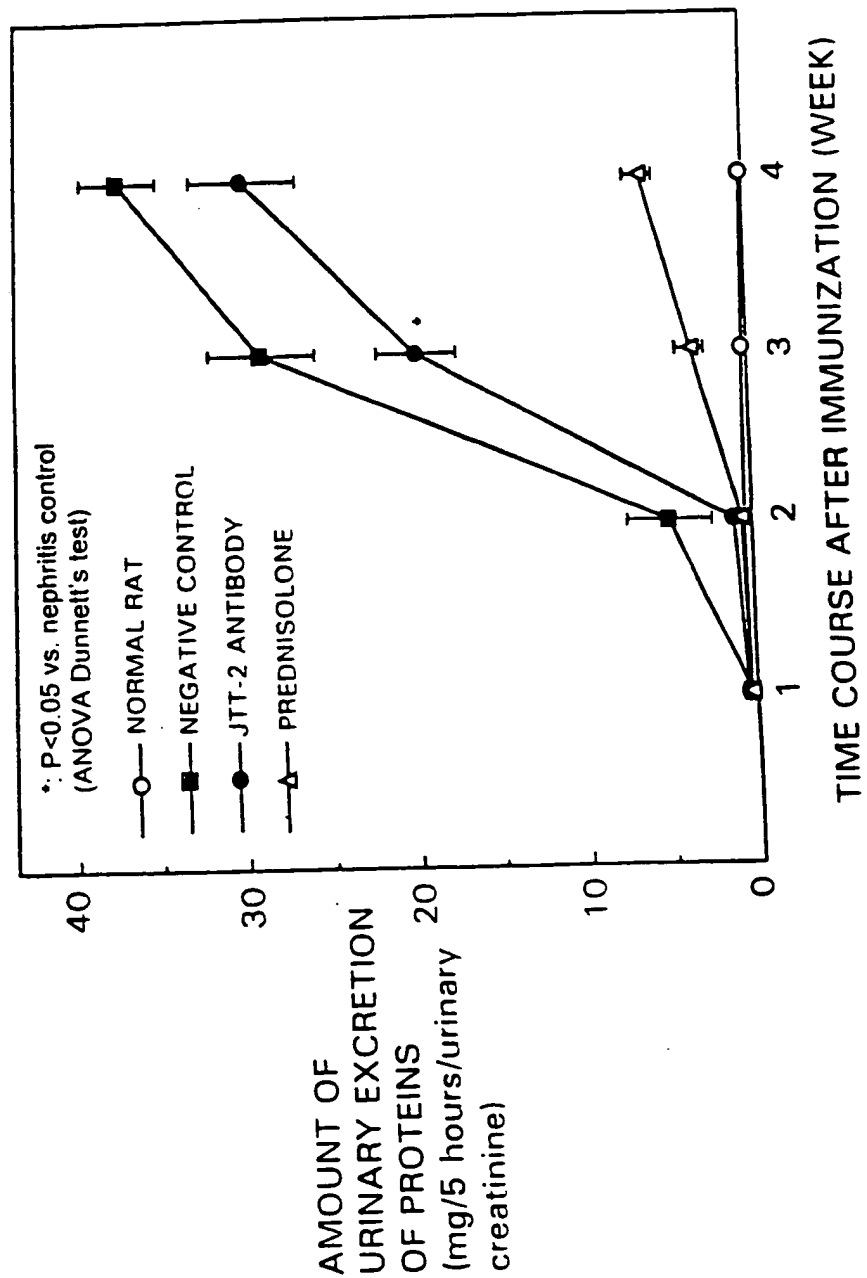


FIG. 17

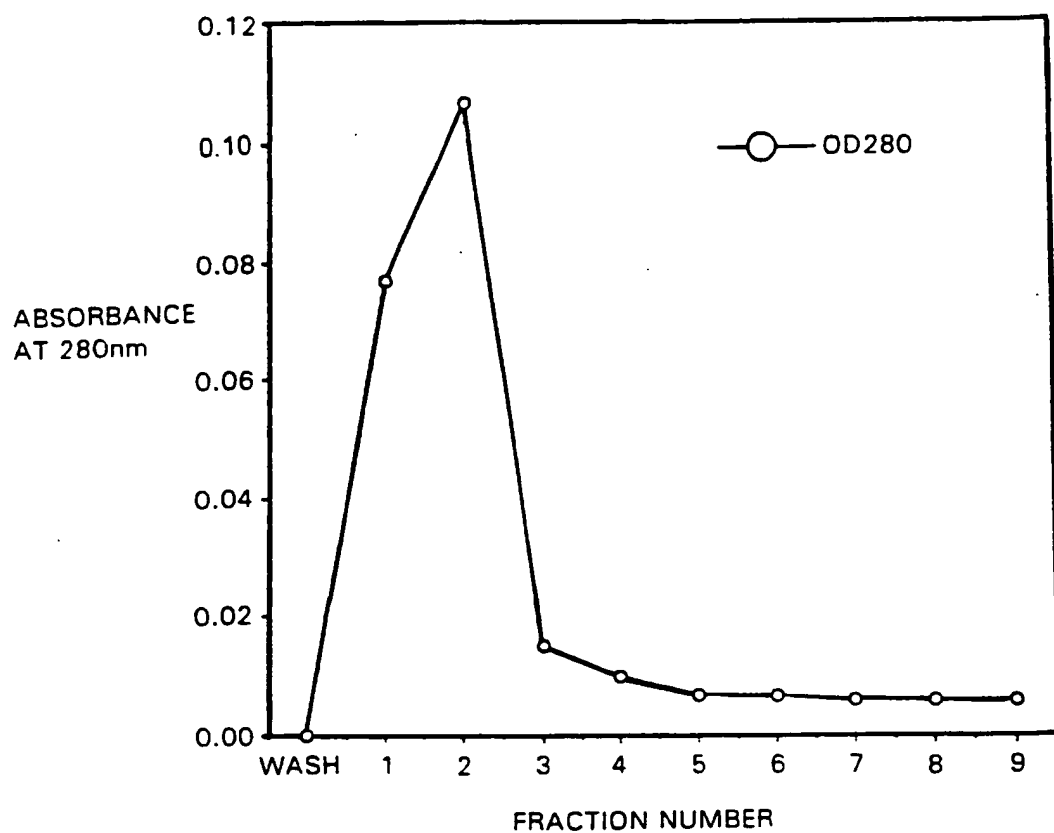


FIG. 18

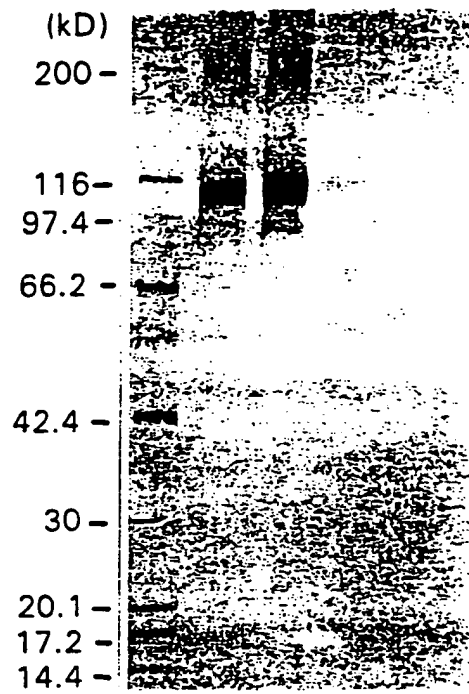


FIG. 19

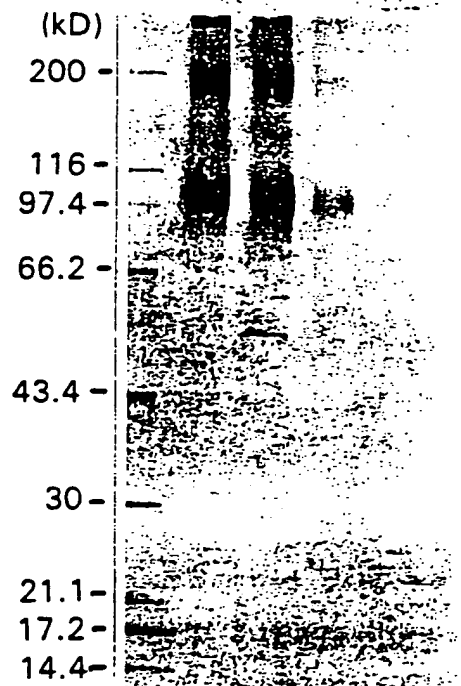


FIG. 21

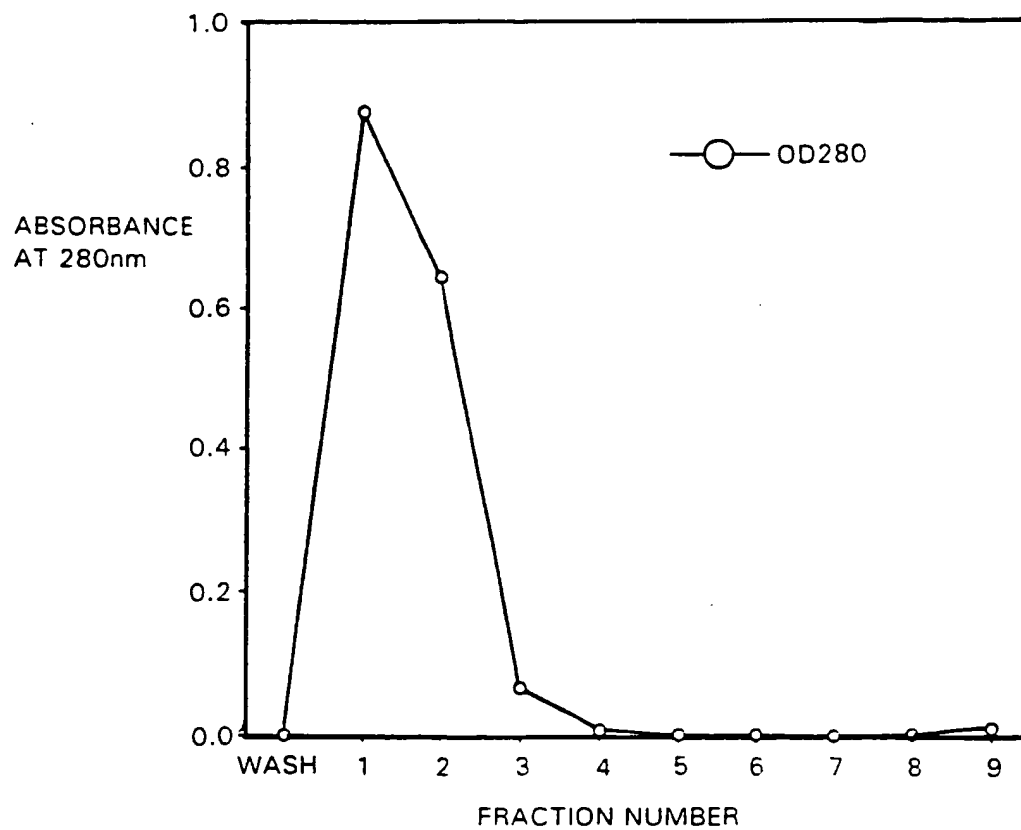


FIG. 20

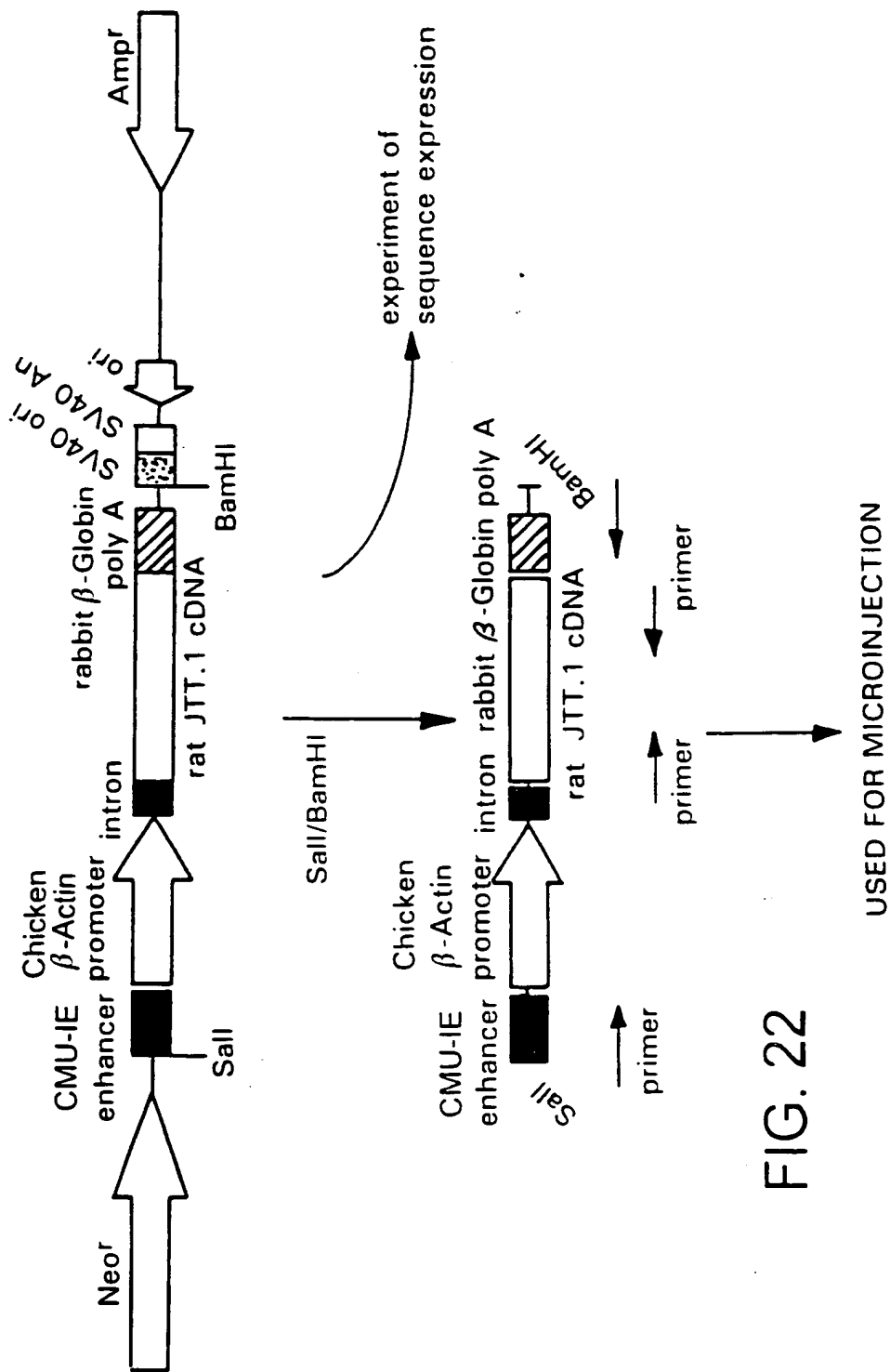


FIG. 22